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EXAMINER

PATEL, SHAMBHAVI K

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,784	Applicant(s) BARBARESI ET AL.	
	Examiner SHAMHAVI PATEL	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 21-40 have been presented for examination.

Response to Arguments

2. In view of Applicant's amendments and arguments, the 35 U.S.C. 112 rejection of claim 39 and 35 U.S.C. 101 rejection of claims 30 and 39 are withdrawn.

3. Applicants' arguments regarding the prior art rejection have been fully considered but they are not persuasive.

- i. **Applicants submit**, on pages 10-11 of the remarks, that Marzo does not disclose or suggest that a device has a plurality of different implementations and also has an interfacing object with an internal side being related to the plurality of different implementations.

Examiner notes that Marzo discloses simulating a communications network through objects that model network modules or devices through objects (**section 2: ASE and TEG**). Each of these can be configured by the user (**section 2: ASE's modules can be extended, or new modules can be added to ASE; the TEG is "completely configurable"**). The different configurations of the ASEs and TEGs are interpreted to be equivalent to the claimed set of module or devices "which has a plurality of different implementations." Moreover, Marzo discloses an internal interface that communicates with each of the ASEs and TEGs (**figures 7 and 8: all ASE processes have Generic Service Interface and SNMP Interface and all TEG processes have a Communication Module**). The term "related" in the claim is given its broadest reasonable interpretation, and is interpreted to be equivalent to the communication between each of the interfaces and their respective objects.

- ii. **Applicants submit**, on pages 11-12 of the remarks, that Marzo merely mentions that a network manager obtains statistics, and does not disclose or suggest that statistic data is measured through an external side of an interfacing object.

Examiner notes that as per **figures 8 and 9**, all communications to the TEG must be made through the communication module (i.e. interface), and that all communications with the ASE occur through either the Generic Server Interface or the SNMP interface. Marzo discloses, in **section 4**, that statistics are obtained

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by the network manager through a connection with the ASEs (**“The AMA is connected to each ASE on the platform, collecting data from the ASE processes; figure 10”**). Since an ASE can only communicate through either the Generic Server Interface or the SNMP interface (**as per figure 8**), the AMA must communicate with (and therefore, obtain statistics through) this interface.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claim 21-26, 29-35 and 38-40 are rejected under 35 U.S.C. 102(b)** as being clearly anticipated by **Marzo (“An ATM Distributed Simulator for Network Management Research”)**.

Regarding claims 21 and 30:

Marzo discloses a method for simulating a communications network through objects that model a respective set of network modules or devices (**Introduction**), comprising the step of inserting for every module or device of said set at least one respective interfacing object with other modules or devices of said set (**figure 8: Generic Service Interface, SNMP Interface; figure 9: Communication Module**) which has a plurality of implementations (**section 2: ASE's modules can be extended, or new modules can be added to ASE; the TEG is “completely configurable”**), said respective interfacing object having an external side and an internal side with respect to the module or device (**figures 8 and 9: interfaces provide communication between inner and outer modules**), said external side of said respective interfacing object being uniform for all modules or devices of said set (**figures 7 and 8: all ASE processes have Generic Service Interface and SNMP Interface and all TEG processes have a Communication Module**), said internal side of said respective interfacing object being related to the plurality of different implementations of said modules or devices (**as per figures 7 and 8, all communications going into and coming out of the ASE and TEG objects must go through the Generic Service Interface, the**

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SNMP Interface or the Communication Module, and because these interfaces communicate with the implementations, they are related to the implementations).

Regarding claim 22:

Marzo discloses realizing, for a module or device of said set, a plurality of different implementations **(figure 7: ASE and TEG objects)** and providing a unique interfacing object for all different implementations of said plurality **(figures 8 and 9: ASE objects have Generic Server Interface and SNMP Interface while TEG objects have Communication Module).**

Regarding claim 23:

Marzo discloses realizing, for a module or device of said set, a plurality of different implementations **(figure 7: ASE and TEG objects)** and providing a respective interfacing object for every different implementation of said plurality of different implementations **(figures 8 and 9: ASE objects have Generic Server Interface and SNMP Interface while TEG objects have Communication Module).**

Regarding claims 24 and 33:

Marzo discloses the method according to claim 21, comprising the step of configuring the external side of said interfacing objects to allow communication among modules or devices of said set as events **(section 2 4th paragraph: TEG generates events).**

Regarding claim 25:

Marzo discloses the system according to claim 21, wherein the external side of said interfacing objects is configured for allowing the communication among modules or devices of said set as messages **(section 2: 9th paragraph).**

Regarding claims 26 and 35:

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Marzo discloses the method according to claim 21, comprising the steps of: providing a statistics managing module to collect statistic data pertaining to the operation of said simulated network; and measuring said statistic data through said statistics managing module through the external side of said interfacing objects associated with the modules or devices of said set **(section 4 1st paragraph: AMA collects statistics)..**

Regarding claims 29 and 38:

Marzo discloses the method according to claim 21, wherein said interface objects comprise functionalities selected from: messages dispatching functionality, events dispatching functionality, messages receiving functionality, and events receiving functionality **(section 2 8th and 10th paragraphs: generic server interface to interconnect and communicate all ASE and TEG processes).**

Regarding claim 31:

Marzo discloses realizing, for a module or device of said set, a plurality of different implementations **(figure 7: ASE and TEG objects)** and providing a unique interfacing object for all different implementations of said plurality **(figures 8 and 9: ASE objects have Generic Server Interface and SNMP Interface while TEG objects have Communication Module).**

Regarding claim 32:

Marzo discloses realizing, for a module or device of said set, a plurality of different implementations **(figure 7: ASE and TEG objects)** and providing a respective interfacing object for every different implementation of said plurality of different implementations **(figures 8 and 9: ASE objects have Generic Server Interface and SNMP Interface while TEG objects have Communication Module).**

Regarding claim 34:

Marzo discloses the system according to claim 30, wherein the external side of said interfacing objects is configured for allowing the communication among modules or devices of said set as messages **(section 2: 9th paragraph).**

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Regarding claim 39:

Marzo discloses at least one respective interfacing object having an external side and an internal side with respect to the modeled module or device, said external side of said respective interfacing object having a character that is independent from idiosyncrasies of said module or device (**figures 7 and 8: all process have one of the interfaces**).

Regarding claim 40:

Marzo discloses a computer readable medium encoded with a computer program product loadable into a memory of at least one computer, the computer program product comprising portions of software code for performing the method according to any one of claims 21 to 29 (**abstract and Introduction**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. **Claim(s) 27, 28, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marzo ("An ATM Distributed Simulator for Network Management Research") in view of Szymanski ("Real-Time On-Line Network Simulation").**

Regarding claims 27, 28, 36, and 37:

Marzo does not explicitly disclose exchanging information with homologous objects associated with the modules or devices of said set through structures comprising: an indicator of the source module or device; an indicator of the target module or device; a time indicator and the exchanged information. **Szymanski teaches** network simulation that records information such as the target and destination of each packet, timing information, and exchange information (**section 2.1 4th paragraph: source, destination, timing**). At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teachings of Marzo and Szymanski in order to employ a general method for efficient parallelization of network simulation (**Szymanski: abstract**).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. **Examiner's Remarks:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the

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references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shambhavi Patel whose telephone number is (571) 272-5877. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-22792279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKP

/Kamini S Shah/
Supervisory Patent Examiner, Art Unit 2128